

## **Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040)**

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***BC Cribs: top layer of dirt  
removal at 216-B-26***



**2719WB (Medical Aid Station)  
roof repairs**

## Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford*. There are three major components to this work scope:

- Deactivation & Decommissioning (D&D) [R. E. Wilkinson],
- Waste Sites Remediation [B. H. Ford], and
- Reliability Projects [R. G. Slocum].

NOTE: Unless otherwise noted, all information contained herein is as of the end of May 2008.

## Notable Accomplishments

### Deactivation and Decommissioning

#### 231-Z Inventory Reduction

- Documented Safety Analysis (DSA) transmitted to RL for approval.
- IP-2 containers inspected and staged at 231-Z.
- One Time Request for Shipping (OTRS) checklist completed for IP-2 container use.
- Staged standard waste box (SWB) at 231-Z.
- Tie-down calculations completed and are in final review and approval process.

#### BC Control Area

- BC Control Area Action (BCCA) Memorandum was approved by RL and Ecology June 2, 2008.
- The Remedial Action Work Plan (RAWP) was transmitted to RL May 21, 2008.
- Completed the Ecological/Biological report for Zone A of the BCCA May 28, 2008.
- Mobile offices have been declared operational, occupancy permit approved, and crews moved from U Plant to the BC Cribs/BCCA site.

#### 200 North Area

- Rail car white paper in comment incorporation from second FH review.
- Remaining Sites Sampling Analysis Plan (SAP) in 30-day EPA review.
- Remaining Sites RAWP in 30-day RL review.
- 212 Building Engineering evaluation/cost analysis (EE/CA) in FH review.

#### U Plant Regional Closure Zone

- Comment resolution sessions with RL, EPA and Ecology on 'minor' comments to the 221-U RD/RAWP commenced. Comment resolution activities are expected to continue through June.

#### Waste Site Remediation

- Initiated B-26 excavation at BC Cribs.
- Completed down posting for east section of BC Control Area.
- Completed drilling, sampling, decommissioning at 216-B-55 Trench.
- Completed 216-A-5 Crib direct push and geophysical logging.
- Completed 20-ft direct pushes at all CW-1 ponds except 216-T-4B.
- Completed 216-U-10 large diameter direct push and logging.
- Completed final well designs for BC Cribs soil desiccation treatability test.
- Obtained EPA concurrence to cancel 216-T-36 borehole (\$1.5M savings over two years).

## Notable Accomplishments, continued

### Reliability Projects

- Completed Project L-326, *South Hanford Consolidated Fire Station* Mission Needs Document for the Hanford Fire Department South Area Fire Station on May 22, 2008.
- Submitted DOE Order 430.1B, *Real Property Asset Management*, Ten Year Site Plan final draft to DOE-HQ on May 28, 2008.
- Successfully completed Factory Mutual (FM) testing of the Radio Fire Alarm Replacement (RFAR) equipment.
  - FM approval labels will be installed on approximately 275 RFAR boxes.
- Received a lube truck on May 20, 2008.

## FY 2008 Funds vs. Spend Forecast (\$M)

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
<b>RL-0040</b> Nuclear Facility D&D, Remainder of Hanford	\$ 86.8	\$ 78.3	\$ 8.6

## Schedule/Cost Performance (\$M)

Nuclear Facility D&D, Remainder of Hanford	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/ CTD)
Current Period (Month)	\$9.2	\$8.7	\$7.0	-\$0.5	-5.7%	\$1.7	19.5%	\$78.6
Cumulative-to-Date (FY 2004-Present)	\$295.7	\$291.7	\$285.0	-\$4.0	-1.4%	\$6.7	2.3%	\$334.2

Numbers are rounded to the nearest \$0.1M.

### CTD Schedule Performance (-\$4.0M/-1.4%):

The schedule variance (SV) for the D&D Project (\$0.0M) is within reporting thresholds.

The unfavorable SV for Waste Site Remediation (-\$3.2M) is due to regulator delays in approving documents required to initiate waste site characterization field activities.

The unfavorable SV for Reliability Projects (-\$0.8M) is associated with the delayed approval of the Memorandum of Agreement required to initiate Project *L-614, Repeater Sites Safety Renovations*, *L-606, Overlay Road to Rattlesnake*, construction activities on hold per RL direction, and deferral to out-year of the development of the *L-631, Restoring Reliability to Hanford Central Plateau Water Supply*, conceptual design report.

## Schedule/Cost Performance (\$M), continued

### CTD Cost Performance (+\$6.7M/+2.3%):

The favorable cost variance (CV) for D&D (+\$4.0M) is primarily due to the following:

- Prior year cost overruns in 200-UW-1 U Zone Waste Site Remediation (-\$3.9M) resulting from:
  - Additional direct push sampling during field investigation to determine contamination levels.
  - Greater than planned effort to resolve Feasibility Study/Planning Package (FS/PP) comments and Remedial Design SAP.
  - Delays in barrier construction without reductions in staffing levels.
  - Lateral spread of contamination at 200-W-42 resulting in more waste containers being shipped to the Environmental Restoration Disposal Facility (ERDF) than planned.
- Offset by prior year efficiencies and variance distributions (+\$8.1M).

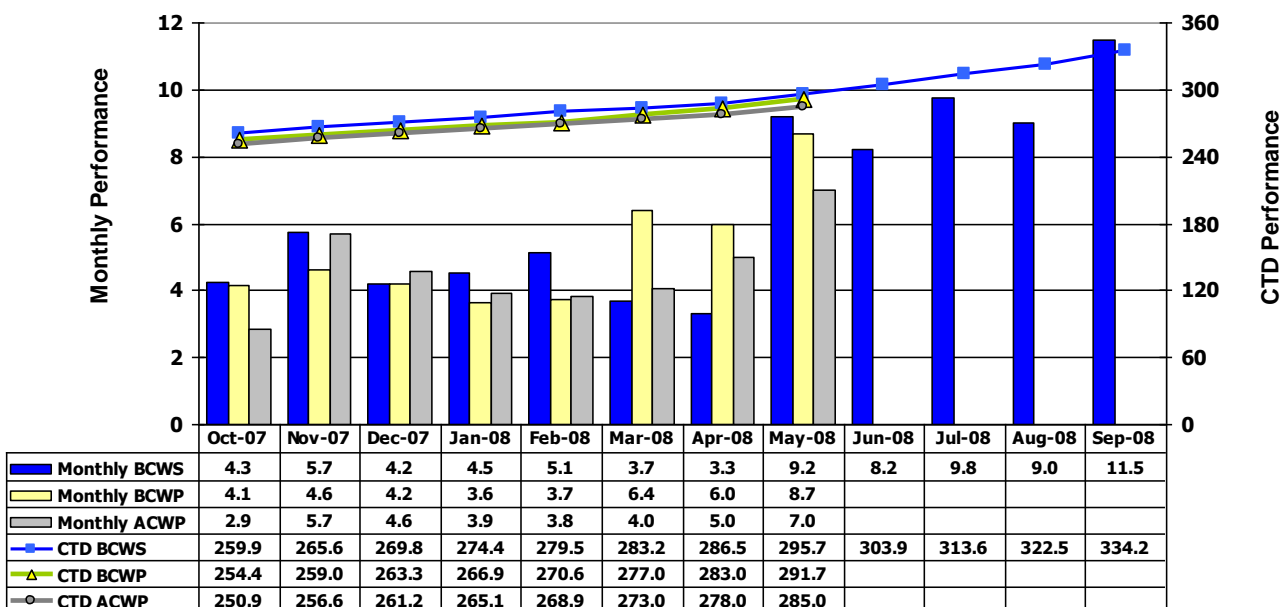
The favorable CV for Waste Site Remediation (+\$2.0M) is due to favorable variance distributions and prior year project management savings offset by prior year increased costs associated with high-risk boreholes.

The favorable CV for Reliability Projects (+\$0.1) is primarily due to the following:

- Efficiencies and favorable bids in prior year electrical projects (+\$1.5M).
- Road refurbishments (+\$0.7M).
- Capital equipment procurements (+\$1.0M).
- Project L-429, *12-Inch Water Line Mortar Lining Along 4th Street from Baltimore to Canton*, (+\$0.5M).
- Miscellaneous (+\$0.1M).
- Offset by increase in steel prices for prior year facility and water projects (-\$3.2M), and prior year telecommunication projects technology deployment (-\$0.5M).

The favorable CV for Closure Services (+\$0.6M) is within established thresholds.

### Performance Analysis CTD and Monthly (\$M)



## Milestone Achievement

*Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of BCRs approved during the reporting period.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
CPDD-07-004	212-N nuclear facility hazard reduction and downgrade completed	RL	11/30/07	10/25/07		Complete
M-091-40L-016	M-91-40L.4.D Quarterly Burial Ground vent/substrate sampling results (1st Qtr 2008)	HQ	12/15/07	11/21/07		Complete
CPDD-07-008	Complete Construction of Project L-626, 100B-A Water System Enhancement	RL	12/31/07	12/11/07		Complete
M-091-40L-017	M-91-40L.5.A Quarterly Burial Ground vent/substrate sampling results (2nd Qtr 2008)	HQ	3/15/08	2/25/08		Complete
CPDD-07-0010	Complete phase one of the BC Cribs and Trenches Treatability Test Plan	RL	3/30/08	3/28/08		Complete
CPDD-08-001	241-U-361 Settling Tank Characterization and Sampling completed	RL	3/31/08	3/4/08		Complete
M-091-40L-018	M-91-40L.5.B Quarterly Burial Ground vent/substrate sampling results (3rd Qtr 2008)	HQ	6/15/08	5/30/08		Complete
CPDD-08-004	Complete phase 2a of the BC Cribs and Trenches Treatability Test Plan	RL	7/31/08		7/31/08	On schedule
M-15-40D	Submit Revised Feasibility Study Report and Revised Proposed Plan for the 200-CW-5 OU	HQ	7/31/08		7/31/08	On schedule
M-091-40L-019	M-91-40L.5.C Quarterly Burial Ground vent/substrate sampling results (4th Qtr 2008)	HQ	9/15/08		9/15/08	On schedule
CPDD-08-003	Complete characterization of potential contamination plume in the BC Cribs and Trenches	RL	9/30/08		9/30/08	On schedule
CPDD-08-006	Complete 231Z nuclear facility hazard reduction	RL	9/30/08		8/27/08	Ahead of schedule
CPDD-08-011	Excavate 20,000 tons of contaminated Soil at BC Control Area	RL	9/30/08		9/9/08	Ahead of schedule
CPRP-08-001	Complete construction for Project L-641, 273E Safety Enhancements	RL	10/31/08		9/30/08	Ahead of schedule
CPRP-08-002	Complete construction for Project L-645, 100N Hanford Fire Department Potable Water System	RL	11/26/08		11/26/08	On schedule